

**REMARKS UNDER 37 CFR § 1.111**

**Formal Matters**

Claims 1-15 are pending after entry of the amendments set forth herein.

Claims 1-15 were examined. Claims 1-15 were rejected.

Claims 1 and 8 have been amended above to correct grammatical errors.

Applicants respectfully request reconsideration of the application in view of the amendments and remarks made herein.

No new matter has been added.

**The Office Action**

**Claims Rejected Under 35 U.S.C. Section 103(a) (Park et al. as evidenced by Fluke and in view of Guiseppi-Elie and Eggers et al.)**

In the Official Action of April 23, 2007, claims 1-5, 7-8, 10-11 and 13-14 were rejected under 35 U.S.C. Section 103(a) as being unpatentable over Park et al. (Science, 2002) as evidenced by Fluke Corporation (Fluke Model 187 & 189 True RMS Multimeter Users Manual, 2000) and in view of Guiseppi-Elie, U.S. Patent No. 5,312,762 and Eggers et al., U.S. Patent No. 5,891,630. The Examiner asserted that Park et al. discloses all of the features of the rejected claims, except that the Examiner admitted that Park et al. fails to disclose a resistive pad of material as claimed, and fails to disclose a substrate comprising integrated addressing circuitry in operable relation to each of the plurality of features, and fails to disclose the step of providing a signal to the addressing circuitry to select one of the plurality of features to be interrogated.

The Examiner further asserted that Guiseppi-Elie teaches, at column 4, lines 12-68, chemoresistive biosensor devices with highly resistive membrane films between electrodes, in order to provide a biosensor with high detection sensitivity and low detection limit. The Examiner concluded that it would have been obvious to modify the method of Park et al. with highly resistive membrane films between electrodes, as taught by Guiseppi-Elie, in order to provide a biosensor with high detection sensitivity and low detection limit.

Applicants strongly disagree. Guiseppi-Elie discloses a method of measuring an analyte by measure the electrical resistance of a polymer film that reacts with the analyte, see the title. As such, Guiseppi-Elie teaches the use of an electroactive polymer, the electrical resistance of which changes when it reacts with the analyte to be measured, see the abstract. Accordingly, the method of Guiseppi-Elie operates on an entirely different principle than the method of Park et al., and it respectfully submitted that it would not have been obvious to combine the teaching of Guiseppi-Elie with the disclosure of Park et al. to modify the method of Park et al. to incorporate the electroactive polymer of Guiseppi-Elie.

Further, if the teachings were to be combined in the manner suggested by the Examiner, this would cause erroneous readings using Park et al.'s method of measuring resistance across the metallized oligonucleotide strands, because at the same time that the metallization process would be occurring, the polymer would also be reacting with the analyte and therefore the resistance across the polymer would not be constant and would confound the resistance readings across the metallized oligonucleotide, thus rendering the process unreliable and inaccurate.

It is respectfully submitted that Eggers et al. teaches nothing that would correct the errors caused by the combination of Guiseppi-Elie with Park et al. in the manner suggested by the Examiner.

The arguments above apply equally to independent claims 1 and 8, as well as the remainder of the rejected claims which each depend from one of claims 1 and 8.

In view of the above amendments and remarks, the Examiner is respectfully requested to reconsider and withdraw the rejection of claims 1-5, 7-8, 10-11 and 13-14 were rejected under 35 U.S.C. Section 103(a) as being unpatentable over Park et al. (Science, 2002) as evidenced by Fluke Corporation (Fluke Model 187 & 189 True RMS Multimeter Users Manual, 2000) and in view of Guiseppi-Elie, U.S. Patent No. 5,312,762 and Eggers et al., U.S. Patent No. 5,891,630, as being clearly inappropriate.

**Claim Rejected Under 35 U.S.C. Section 103(a) (Park et al. as evidenced by Fluke and in view of Guiseppi-Elie, Eggers et al. and Cheung)**

Claim 6 was rejected under 35 U.S.C. Section 103(a) as being unpatentable over Park et al. (Science, 2002) as evidenced by Fluke Corporation (Fluke Model 187 & 189 True RMS Multimeter Users Manual, 2000) and in view of Guiseppi-Elie, U.S. Patent No. 5,312,762 and Eggers et al., U.S. Patent No. 5,891,630, as applied to claims 1 and 3 above, and further in view of Cheung, U.S. Patent No. 5,132,242.

Without acquiescing to the above ground of rejection, Applicants respectfully submit that claim 6 is patentable over the combined teachings of Park et al., Fluke, Guiseppi-Elie and Eggers et al. for at least the same reasons provided above with regard to claim 1, since claim 6 depends from claim 1. It is further respectfully submitted that the deficiencies in the combined teachings of Park et al., Fluke, Guiseppi-Elie and Eggers et al. in meeting all of the recitations of claim 1, as noted above, are not cured by the teachings of Cheung.

In view of the above remarks, the Examiner is respectfully requested to reconsider and withdraw the rejection of 6 under 35 U.S.C. Section 103(a) as being unpatentable over Park et al. (Science, 2002) as evidenced by Fluke Corporation (Fluke Model 187 & 189 True RMS Multimeter Users Manual, 2000) and in view of Guiseppi-Elie, U.S. Patent No. 5,312,762 and Eggers et al., U.S. Patent No. 5,891,630, as applied to claims 1 and 3 above, and further in view of Cheung, U.S. Patent No. 5,132,242., as being clearly inappropriate.

**Claim Rejected Under 35 U.S.C. Section 103(a) (Park et al. as evidenced by Fluke and in view of Guiseppi-Elie, Eggers et al. and Nayak)**

Claim 6 was rejected under 35 U.S.C. Section 103(a) as being unpatentable over Park et al. (Science, 2002) as evidenced by Fluke Corporation (Fluke Model 187 & 189 True RMS Multimeter Users Manual, 2000) and in view of Guiseppi-Elie, U.S. Patent No. 5,312,762 and Eggers et al., U.S. Patent No. 5,891,630, as applied to claim 8 above, and further in view of Nayak, U.S. Patent No. 4,789,628.

Without acquiescing to the above ground of rejection, Applicants respectfully submit that claim 9 is patentable over the combined teachings of Park et al., Fluke, Guiseppi-Elie and Eggers et al. for at least the same reasons provided above with regard to claim 8, since claim 9 depends from claim 8. It is further respectfully submitted that the deficiencies in the combined teachings of Park et al., Fluke, Guiseppi-Elie and Eggers et al. in meeting all of the recitations of claim 8, as noted above, are not cured by the teachings of Nayak.

In view of the above remarks, the Examiner is respectfully requested to reconsider and withdraw the rejection of 9 under 35 U.S.C. Section 103(a) as being unpatentable over Park et al. (Science, 2002) as evidenced by Fluke Corporation (Fluke Model 187 & 189 True RMS Multimeter Users Manual, 2000) and in view of Guiseppi-Elie, U.S. Patent No. 5,312,762 and Eggers et al., U.S. Patent No. 5,891,630, as applied to claim 8 above, and further in view of Nayak, U.S. Patent No. 4,789,628, as

being clearly inappropriate.

**Claim Rejected Under 35 U.S.C. Section 103(a) (Park et al. as evidenced by Fluke and in view of Guiseppi-Elie, Eggers et al. and Mallet et al.)**

Claim 12 was rejected under 35 U.S.C. Section 103(a) as being unpatentable over Park et al. (Science, 2002) as evidenced by Fluke Corporation (Fluke Model 187 & 189 True RMS Multimeter Users Manual, 2000) and in view of Guiseppi-Elie, U.S. Patent No. 5,312,762 and Eggers et al., U.S. Patent No. 5,891,630, as applied to claim 8 above, and further in view of Mallet et al., U.S. Patent No. 6,660,533.

Without acquiescing to the above ground of rejection, Applicants respectfully submit that claim 12 is patentable over the combined teachings of Park et al., Fluke, Guiseppi-Elie and Eggers et al. for at least the same reasons provided above with regard to claim 8, since claim 12 depends from claim 8. It is further respectfully submitted that the deficiencies in the combined teachings of Park et al., Fluke, Guiseppi-Elie and Eggers et al. in meeting all of the recitations of claim 8, as noted above, are not cured by the teachings of Mallet et al.

In view of the above remarks, the Examiner is respectfully requested to reconsider and withdraw the rejection of 12 under 35 U.S.C. Section 103(a) as being unpatentable over Park et al. (Science, 2002) as evidenced by Fluke Corporation (Fluke Model 187 & 189 True RMS Multimeter Users Manual, 2000) and in view of Guiseppi-Elie, U.S. Patent No. 5,312,762 and Eggers et al., U.S. Patent No. 5,891,630, as applied to claim 8 above, and further in view of Mallet et al., U.S. Patent No. 6,660,533, as being clearly inappropriate.

**Claim Rejected Under 35 U.S.C. Section 103(a) (Park et al. as evidenced by Fluke and in view of Guiseppi-Elie, Eggers et al. and Sandstrom)**

Claim 15 was rejected under 35 U.S.C. Section 103(a) as being unpatentable over Park et al. (Science, 2002) as evidenced by Fluke Corporation (Fluke Model 187 & 189 True RMS Multimeter Users Manual, 2000) and in view of Guiseppi-Elie, U.S. Patent No. 5,312,762 and Eggers et al., U.S. Patent No. 5,891,630, as applied to claim 8 above, and further in view of Sandstrom, U.S. Patent No. 6,545,758.

Without acquiescing to the above ground of rejection, Applicants respectfully submit that claim

15 is patentable over the combined teachings of Park et al., Fluke, Guiseppi-Elie and Eggers et al. for at least the same reasons provided above with regard to claim 8, since claim 15 depends from claim 8. It is further respectfully submitted that the deficiencies in the combined teachings of Park et al., Fluke, Guiseppi-Elie and Eggers et al. in meeting all of the recitations of claim 8, as noted above, are not cured by the teachings of Sandstrom.

In view of the above remarks, the Examiner is respectfully requested to reconsider and withdraw the rejection of 15 under 35 U.S.C. Section 103(a) as being unpatentable over Park et al. (Science, 2002) as evidenced by Fluke Corporation (Fluke Model 187 & 189 True RMS Multimeter Users Manual, 2000) and in view of Guiseppi-Elie, U.S. Patent No. 5,312,762 and Eggers et al., U.S. Patent No. 5,891,630, as applied to claim 8 above, and further in view of Sandstrom, U.S. Patent No. 6,545,758, as being clearly inappropriate.

### **Conclusion**

Applicants submit that all of the claims are in condition for allowance, which action is requested. If the Examiner finds that a telephone conference would expedite the prosecution of this application, please telephone the undersigned at 408-736-3554.

The Commissioner is hereby authorized to charge any underpayment of fees associated with this communication, including any necessary fees for extensions of time, or credit any overpayment to Deposit Account No. 50-1078, order number 10031347-1.

Respectfully submitted,

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